

printouts will be in the proper order. Accordingly, the the collection of printouts obtained by distributed printing is facilitated.

5 Figs. 9 to 11 are diagrams useful in describing output in a case where reprinting is performed based upon the operation described above in conjunction with Figs. 5 to 8 in the event of a malfunction when the distributed printing system of the present invention is used.

10 Here it is assumed that a job of nine pages is being output by three printers A to C (13 to 15). Further, it is assumed that a distributed printing algorithm has been configured as shown in Fig. 3. When the printers are operating normally, three pages are  
15 printed by each printer in the manner illustrated.

Figs. 9 and 10 illustrate an instance where printer B (face-down ejection type), which is supposed to print the fourth to sixth pages, malfunctions after printing the fourth page. Fig. 11 illustrates an instance where  
20 printer C, which is supposed to print the seventh to ninth pages, malfunctions after printing the seventh page.

If, when a malfunction occurs as shown in Figs. 9 and 10, metafile spooling is being carried out and it  
25 can be detected that printer C is of the type that ejects paper face-up, then the job that includes only the fifth and sixth pages is reconstructed and

introduced to printer C, as indicated at (1) in Fig. 9. As a result, pages are output to printer C in the order 5, 6, 7, 8, 9 from top down. Further, if metafile spooling is not being carried out and it can be detected

5 that printer A is of the type that ejects paper face-down, then the job that includes the fourth to sixth pages, which had been introduced to printer B that malfunctioned, is introduced to printer A, as indicated at (2) in Fig. 9. As a result, pages are introduced to

10 printer A in the order 1, 2, 3, 4, 5, 6 from bottom up. Further, if metafile spooling is not carried out, it cannot be detected that printer A is of the type that ejects paper face-down but it can be detected that printer C is of the type that ejects paper face-up, then

15 the job that includes the fourth to sixth pages, which had been introduced to printer B that malfunctioned, is introduced to printer C, as indicated at (3) in Fig. 9. As a result, pages are introduced to printer C in the order 4, 5, 6, 7, 8, 9 from top down.

20 In a case where printer A is not of the face-down ejection type and printer C is not of the face-up ejection type, processing is executed as follows: If metafile spooling is being carried out, then the job that includes only the fifth and sixth pages is

25 reconstructed and is re-introduced to bin 2 of printer A specified in setting area 44 of Fig. 4, as indicated at (1) in Fig. 10. If metafile spooling is not being

carried out, then the job that includes the fourth to sixth pages, which had been introduced to printer B that malfunctioned, is re-introduced to bin 2 of printer A, as indicated at (2) in Fig. 10.

5           A case of introducing a job to bin 2 of printer A was described with reference to (1) and (2) in Fig. 10, however, bin or printer to which the job is introduced is not limited to bin 2 of printer A. For instance, if printer D is set in the item 43 in Fig. 4, the  
10       destination of the job is set to printer D at (1) and (2) in Fig. 10. Furthermore, if any bin of printer D is designated in item 43 of the user interface shown in Fig. 4, the job is introduced to the designated bin of printer D at (1) and (2) in Fig. 10.

15           Further, in a case where the operation as indicated at (2) in Fig. 9 is performed when print data of the RAW format is stored in the ascending order (1, 2, 3, ...), the print data is transferred to printer A in the order as stored. Whereas, in a case where the operation as  
20       indicated at (3) in Fig. 9 is performed when the print data of the RAW format is stored in the ascending order, the control program of the present invention recognizes information on page break and layout contained in the data of the RAW format, and changes the order of pages  
25       from the ascending order to the descending order on the basis of the recognized information on page break and